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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,850	06/13/2006	Hans-Detlef Luginsland	274669US0PCT	5763

22850 7590 07/19/2011  
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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LORENZO, JERRY A

ART UNIT	PAPER NUMBER
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1731

NOTIFICATION DATE	DELIVERY MODE
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07/19/2011

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
10/542,850	13 June 2006	LUGINSLAND ET AL.	274669US0PCT

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.  
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ALEXANDRIA, VA 22314

**EXAMINER**

JERRY A. LORENZO

ART UNIT	PAPER
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1731	20110713A
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DATE MAILED:

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner for Patents**

Please find attached the Request for Reconsideration. The application has been forwarded to the BPAI for decision on the request.

/JERRY A LORENZO/  
Supervisory Patent Examiner, Art Unit 1731



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/542,850  
U.S. Application Filing Date: 06/13/2006  
Appellant(s): Hans-Detlef Luginsland et al.

**REQUEST FOR REHEARING BY EXAMINER UNDER MPEP 1214.04**

It is respectfully requested that the decision by the Board of Patent Appeals and Interferences (Board) dated 2 June 2010 in the above identified application (Ex parte Hans-Detlef Luginsland, Appeal No. 2010-001210 (BPAI May 23, 2005)) be reheard on the written record as supplemented below. The Board decision of June 2, 2010 reversed the rejection of claims 1-8, 18, 19, and 23-31 under 35 U.S.C. § 103 as being unpatentable over the combined teachings of Esch and Boyer; Esch, Boyer & Uhrlandt; Esch and Luginsland and Uhrlandt and Boyer. The Board decision concluded that because certain parameters at issue had to be "derived," the prior art disclosures failed to support the prima facie obviousness finding and thus, the Board could not sustain the rejections. This rationale is based on a misinterpretation of the "derived" ratio of the silanol group density to BET surface area in Esch. It is believed that the Board would have sustained the rejection but for this misinterpretation of the material fact.

## PERIOD FOR REPLY

Appellant may file a reply to this request for rehearing within **two (2) months** of the mailing date of this request for rehearing. This two-month period may **not** be extended under the provisions of 37 CFR 1.136(a). After the expiration of this two-month period (plus an appropriate period for mail processing), the above-identified application will be forwarded to the Board for consideration of this request for rehearing.

## REASONS FOR THE BOARD TO RECONSIDER

### 1. Ground of Rejection

The Board reversed the following grounds of rejection:

We REVERSE the rejection of claims 1-17, 18, 19, and 23-31 under 35 U.S.C. § 103(a) in view of the combined teachings of Esch and Boyer.

We REVERSE the rejection of claim 8 under 35 U.S.C. § 103(a) in view of the combined teachings of Esch and Boyer, and Uhrlandt.

We REVERSE the rejection of claims 1-7, 18, 19, and 23-29 under 35 U.S.C. § 103(a) in view of the combined teachings of Esch and Luginsland 693(app).

We REVERSE the rejection of claims 1-5, 7, 8, 18, 19, and 23-31 under 35 U.S.C. § 103(a) in view of the combined teachings of Uhrlandt and Boyer.

In essence, the majority concluded that the grounds of rejection on appeal were improper because the overlapping ranges disclosed in the prior art of Esch et al. cannot support a *prima facie* case of obviousness per MPEP § 2144.05(I) because certain parameters at issue had to be “derived.” Though this issue will be more particularly discussed below, and supported by the dissenting opinion of Administrative Patent Judge

Owens, it believed that the decision of the BPAI, in reversing the grounds of rejection on appeal, is incorrect.

The claim at issue (claim 1 of the instant application) is set forth below:

Claim 1: A precipitated silica which has the following physical and chemical properties:

CTAB surface area	100-200 m <sup>2</sup> /g,
BET/CTAB ratio	0.8-1.05,
DBP value	210-280 g/(100 g),
Sears value V <sub>2</sub>	10-30 ml/(5 g),
Moisture level	4-8%, and
Ratio of Sears value V <sub>2</sub> to	
BET surface area	0.150 to 0.370 ml/(5m <sup>2</sup> ).

Esch et al., as applied in the Examiner's grounds of rejection, discloses a precipitated silica having the following physiochemical properties (abstract; column 1, lines 43-55):

BET surface area	35 to 350 m <sup>2</sup> /g
BET/CTAB surface area ratio	0.8 to 1.1
Pore volume, PV	1.6 to 3.4 ml/g
Silanol group density (V <sub>2</sub> = NaOH consumption)	6 to 20 ml
Average aggregate size	250 to 1500 nm
CTAB surface area	30 to 350 m <sup>2</sup> /g
DBP value	150 to 300 ml/100 g
V <sub>2</sub> /V <sub>1</sub> by Hg porosimetry	0.19 to 0.46
DBP/CTAB	1.2 to 2.4.

As can be seen from the extracts above, the precipitated silica compositions of the instant invention and Esch et al. are comparable except for the fact that Esch is silent as to the disclosure of a ratio of the Sears Value (silanol group density) to the BET surface area (hereinafter "SV:BET"), as required by claim 1. The Examiner's finding of obviousness based upon overlapping ranges, and consistent with MPEP § 2144.05(I), utilized the parameters directly disclosed by Esch et al. to determine the implicit SV:BET parameter.

**2. The Board failed to appreciate that even though the Sears Value of the prior art and the present invention were not expressed on the same basis, conversion to the same basis indicated overlapping ranges.**

Though, as correctly pointed out by APJ Owens in the dissent, the Sears Value of the instant invention and that of Esch et al. do not appear to be on the same basis (the Sears Values of Esch et al. would be multiplied by 5), the implicit SV:BET values of Esch et al. (0.267 to 0.75) overlap those of the instant invention (0.150 to 0.370). As such, the finding of *prima facie* obviousness based upon overlapping ranges is proper and should be affirmed.

Nonetheless, the majority opinion finds that because Esch et al. does not explicitly disclose a SV:BET, the Examiner's calculation of this implicit value is a derivation based upon hindsight reasoning. It is respectfully submitted that this is an incorrect conclusion. The SV:BET parameter directly and implicitly flows from the SV and BET values explicitly disclosed by Esch et al. as much as the density of a substance can be determined given the volume occupied by a given mass of that substance ( $\rho=m/V$ ). Such implicit values are not a product of hindsight; they are a product of mathematical observation.

**3. The Board did not appreciate the flaws in the Wehmeier Declaration**

Even so, the Examiner's *prima facie* case of obviousness is a rebuttable presumption which can be met by a showing of unexpected results. Here, the Appellants provided the Wehmeier Declaration, relied upon by the majority, which purported to show that the Silica III of the instant invention (when compounded with a rubber

formulation) provided superior processing properties and superior cured properties when compared to the silica of the Example 3 of Esch et al.

Firstly, it bears noting that the claims of the instant invention are drawn to a composition, not a method for providing superior processing and curing properties of cured rubber formulations. Secondly, as argued in the dissenting opinion, it is not clear whether the Declaration provides a side-by-side comparison of the claimed invention with the closest prior art or whether any difference shown would be an unexpected difference. Finally, it is respectfully submitted that the Wehmeier Declaration is non-commensurate in scope with the instant invention as set forth in claim 1. This point was well-argued by the Examiner in the Non-final Rejection as well as her Examiner's Answer:

*From the Non-final Rejection of 07/16/2008 (p. 18):*

A comparison of only one example, that being silica III, defined in the instant examples is insufficient to establish criticality over the broad precipitated silica's claimed because said silica III only defines specific properties, those of which are much more narrow when compared to what is claimed, thus said silica III is not sufficient to establish criticality over what is broadly claimed.

*From the Examiner's Answer of 07/24/2009 (pp. 20):*

Furthermore, a reference should be considered as a whole, not only based in its examples (a reference can be used for all it realistically teaches and is not limited to only the examples). In view of this, reliance on only the examples, as appellants have done, is improper.

*From the Examiner's Answer of 07/24/2009 (pp. 21):*

Appellants have disagreed with the Examiner's statement that the declaration is not commensurate with the scope of the claims; they continue by indicating that using the silicas of the present invention leads to drastically shorter vulcanization times, greater vulcanization rates and lower Mooney viscosities.

The Examiner, respectfully, submits that the declaration is not commensurate with the scope of the claims because it does not present a series of measurements reflecting the characteristics recited in instant claims for the silica of instant invention and that of the prior art, in their broadest disclosure and not only in view of one of their examples, to show unexpected results or criticality of the values recited in instant claims.

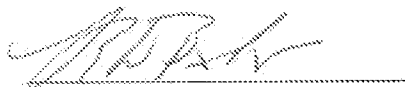
### Conclusion

For the foregoing reasons, it is submitted that the examiner has set forth a proper *prima facie* case establishing the unpatentability of claims 1-8, 18, 19 and 23-31 under 35 U.S.C. § 103, as unpatentable over the combined teachings of Esch. Therefore, it is respectfully requested that the Board decision of August 2, 2010, in the above-identified application be reconsidered and that the rejection of claims 1-8, 18, 19 and 23-31 under 35 U.S.C. § 103 as unpatentable over, the combined teachings of Esch be sustained.

Respectfully submitted,

/J.A. Lorengo/  
Primary Examiner, GAU 1731

Approved:  
/W. Gary Jones/  
Director, Technology Center 1700

  
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Robert Bahr

Acting Associate Commissioner for  
Patent Examination Policy